Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SET B

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JAN 2024

Semester : Semester V - 2021
Course Code : CSE2052
Course Name : Distributed System
Program : B.Tech.

Date : 11-JAN-2024
Time : 9:30AM - 12:30 PM
Max Marks : 100
Weightage : 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS **5 X 2M = 10M**

1. Define distributed system with appropriate example.
(CO1) [Knowledge]

2. State the reason for middleware in distributed system
(CO2) [Knowledge]

3. Define inter process communication with an example
(CO3) [Knowledge]

4. Why is computer clock synchronization necessary in distributed system environment?
(CO4) [Knowledge]

5. How resource sharing playing major role in distributed system?
(CO5) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **5 X 10M = 50M**

6. Elaborate about major differences between a network operating system and a distributed operating system
(CO1) [Comprehension]

7. List out desirable features of message passing system elaborately discuss about each feature.

(CO2) [Comprehension]

8. Design and Implementation Issues of Distributed Shared Memory.

(CO3) [Comprehension]

9. Discuss in detail about deadlock and list out necessary conditions for deadlock.

(CO4) [Comprehension]

10. Elaborate about Process management and discuss process migration with illustrated diagram.

(CO5) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS **2 X 20M = 40M**

11. a) Recommend event ordering in concurrency control with an example space-time diagram.
b) Differentiate between synchronous communication and asynchronous communication.

(CO2) [Application]

12. a) Interpret Ring based election algorithm with an example in detail.
b) Discuss about Threads and Naming system in distributed environment with appropriate diagrams.

(CO5) [Application]